

REMARKS

Claims 1 through 15 are pending in this application. Claims 1, 6 and 10 are amended in several particulars for purposes of clarity in accordance with current Office policy, to assist the examiner and to expedite compact prosecution of this application.

I. Specification

A. The Examiner stated that the title of the invention is not descriptive and requested a new title. Therefore, according to the Examiner's request, the title has been amended.

B. The Examiner objected to the disclosure because of the following informalities: On page 3, line 11, "person computer signal" should be "personal computer signal". On page 9, line 13, "displaying the picture-in-picture and first signal" should be "displaying the personal computer signal and the first signal in picture-in-picture format".

Page 3, line 11 has been corrected accordingly.

Page 9, line 13 does not mention the text mention by the Examiner. On page 9, line 12 there is a mention of a similar text but with the plural of first signal. Therefore, we assume that the Examiner is referring to line 12 instead. However, lines 12 or 13 of page 9 is claim 1. Therefore, following the advice of the Examiner, the text of "displaying the picture-in-picture and first signal" was corrected for the informality by the correcting to "displaying the personal computer signal and the first signal in picture-in-picture format".

Paragraph 15 was corrected for some minor grammatical reasons.

II. Claim Objections

The Examiner stated that Claim 1 is objected to because of the following informalities: On line 7 of claim 1, "displaying the picture-in-picture and first signal" should be "displaying the personal computer signal and the first signal in picture-in-picture format". However, line 7 of claim 1 does not have such a text. However, line 12 of claim 1 does have a similar text. Therefore, according to the suggestion of the Examiner, a correction to correct the informality was made.

III. Claim Rejections - 35 USC § 112 (2nd Paragraph)

The Examiner stated that Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner stated that Claim 1 recites the limitation "the picture-in-picture and first signals" in line 12 of the claim since there is insufficient antecedent basis for this limitation in the claim. The Examiner stated that Claim 6 recites the limitation "the picture-in-picture and first signals" in line 12 of the claim because there is insufficient antecedent basis for this limitation in the claim. Claim 10 recites the limitation "the picture-in-picture and first signals" in line 13 of the claim because there is insufficient antecedent basis for this limitation in the claim. As mentioned above for page 9, line 12, claims 1 and 6 are also corrected according to the Examiner's suggestion. Concerning claim 10, actually line 13 states ""the picture-in-picture and video signals" and not "the

picture-in-picture and first signals" as the Examiner states. We assume that the Examiner meant to refer to the former quote and not the later for claim 10. Therefore, claim 10 was corrected similarly to claims 1 and 6 according to the Examiner suggestion.

IV. Claim Rejections - 35 USC § 102

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheney et al. U.S. Pat. No. 6,519,283 (hereinafter Cheney). The Applicant respectfully traverses.

No claim is anticipated under 35 U.S.C. §102 (b) unless all of the elements are found in exactly the same situation and united in the same way in a single prior art reference. As mentioned in the **MPEP §2131**, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03.

The Examiner states that Cheney teaches an apparatus for processing a signal (e.g., column 4, lines 28-57), comprising: a signal-dispensing unit for dispensing an output signal output from a personal computer in the form of an analog or digital signal (e.g., figure 5; column 3, lines 22-40; column 6, lines 7-25; column 7, lines 19-37); a signal processing unit for performing picture-in-picture signal processing (e.g., figure 3; column 6, lines 25-67) enabling one of a digital personal computer signal generated by the signal dispensing unit and a decoded first signal input from an outside source to be displayed on a main screen and the other to be displayed on at least one sub-screen (e.g., column 7, lines 19-37), and for processing the first signal to be displayed along on the main screen, the first signal being any one of a television signal and a video signal (e.g., figure 3; column 6, lines 25-67); an output unit for outputting an analog personal computer signal generated from the signal dispensing unit in response to a control signal for displaying only the personal computer signal, and outputting an output signal of the signal processing unit in response to a control signal for displaying the personal computer signal and the first signal in picture-in-picture format (e.g., figure 5; column 7, lines 1-37); and a monitor for amplifying (i.e., scaling) the signal output from the outputting unit to be displayed (e.g., figure 3; column 6, lines 25-67; column 9, lines 15-67; column 10, lines 1-67; column 11, lines 1-5).

However, looking at Cheney, Cheney fails to disclose an output unit as claimed in claim 1. In Cheney, as mentioned in figure 5, col. 7, lines 1-37, the pixel select control signal from the host processor into the 2:1 MUX 202 (multiplexor) selects between the decompressed digital video signal (MPEG stream) or the uncompressed video. The pixel select code has three modes including

picture-in-picture. As seen in figure 5, the selected signal is then blended with the on screen graphics. Therefore, the selection is made with the control signal to the MUX which also multiplexes the signals. However, in claim 1, the signal processing unit performs the picture-in-picture signal processing and then the outputting unit outputs either the “un-processed” personal computer signal generated from the *signal dispensing unit* or the picture-in-picture formatted signal from the *signal processing unit*.

Cheney fails to disclose both a *output signal from a personal computer and the first signal being any one of a television signal and a video signal* as claimed in claim 1 and therefore fails to show the signal processing unit performing a picture-in-picture signal processing of the output from personal computer *and the first signal* (being any one of a television signal and video signal). The Examiner mentions that in figure 5, col. 3, lines 22-40 a television output and a computer output is shown. However, in col. 3, lines 22-40 it states that the uncompressed can be derived from a computer with tv output, cable television signal *etc.* However, this only relates to the uncompressed signal. Therefore, using the disclosure for figure 5, in col. 7, lines 17-37, Cheney states the picture-in-picture involves the “uncompressed” signal and a decompressed video signal, *i.e.*, MPEG stream from transport 103. Therefore, Cheney fails to disclose a personal computer signal and a first signal being any one of a television signal and a video signal since Cheney’s decompressed signal is from the transport 103.

Cheney fails to disclose the *monitor for amplifying the signal output from the outputting unit*. The Examiner mentioned that figure 3; column 6, lines 25-67; column 9, lines 15-67; column 10,

lines 1-67; column 11, lines 1-5 of Cheney discloses such a claim. However, these passages fail to show that the monitor amplifies the signal outputted from the outputting unit. As mentioned above, every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.* Therefore, the lack of disclosure concerning the signal from the outputting unit being amplified is enough to show a lack of anticipation.

The Examiner states that claim 2 claims the limitation of a signal conversion unit for converting the picture-in-picture signal output from the signal-processing unit into an analog signal before a signal is output from the outputting unit. However, the Examiner argues that Cheney further discloses the claimed limitation of a signal conversion unit for converting the picture-in-picture signal output from the signal processing unit into an analog signal before a signal is output from the outputting unit (e.g., column 6, lines 1-50).

However, col. 6, lines 1-50 only state that the digital to analog conversion is made prior to output to the television system and not *a signal conversion unit for converting the picture-in-picture signal output from the signal processing unit into an analog signal before a signal is output from the outputting unit*. The outputting unit was explained by the Examiner as being the MUX 202 of figure 5, and clearly the D/A conversion is not made before the outputting unit.

The Examiner states that concerning claim 3, Cheney further discloses the claimed limitation of a decoding unit converting the first signal into a digital signal and decoding the first signal; a scan rate conversion unit for converting a scan rate of the decoded first signal (e.g., figure 5; column 7, lines 19-67; column 8, lines 1-67; column 9, lines 1-8); and a signal processing unit for performing a picture-in-picture signal process on the first signal (e.g., figure 3; column 6, lines 25-67) whose scan rate is converted and the digital personal computer signal, so that one of the first signal and the digital personal computer signal is displayed on the main screen and the other of the first signal and the digital personal computer signal is displayed on the plurality of sub-screens (e.g., figures 3-5; column 7, lines 19-67; column 8, lines 1-67; column 9, lines 1-8), or for processing the first signal to be displayed along on the main screen (e.g., figure 5; column 7, lines 19-37).

However, Cheney fails to disclose the decoding unit as arranged in the claim. In Cheney a unit does not take the TV/video signal (first signal) and converts to a digital signal and decodes the first signal. Figure 5, col. 7, lines 19-67 only shows a MUX 202 and an on screen display blend 204 that do not decode and convert the first signal. In col. 9, a video decode system is mentioned, however, this decode system does not convert and decode and is not as arranged in the claim of the present invention.

Cheney also fails to disclose a scan rate conversion unit that converts the scan rate of the decoded first signal. Figure 5, col. 7, col. 8, col. 9 all fail to show precisely this limitation as arranged in the claims. In col. 10, Cheney discusses full-size scan lines but nothing further is resolved in Cheney.

Concerning claims 4 and 5, the Examiner states that Cheney further discloses the claimed limitation of a decoding unit converting the first signal into a digital signal and decoding the first signal; a scan rate conversion unit for converting a scan rate of the decoded first signal (e.g., figure 5; column 7, lines 19-67; column 8, lines 1-67; column 9, lines 1-8). As shown above, Cheney fails to disclose the decoding unit and the scan rate conversion unit as arranged in the claim.

Concerning claim 15, the Examiner states that Cheney further discloses the claimed limitation of an analog to digital converter unit converting the output signal from the signal dispensing unit from an analog signal into a digital signal for the signal processing unit (e.g., column 7, lines 1-37).

However, looking at col. 7, lines 1-37, it only discloses the uncompressed and the decompressed signals, but nothing noting a unit that does an A/D conversion of the personal computer signal from the signal dispensing unit for the signal processing unit.

Concerning claim 15, the Examiner also states that Cheney discloses a digital to analog converter unit converting the output signal generated from the signal dispensing unit from a digital signal into an analog signal for the outputting unit (e.g., column 6, lines 1-50).

However, col. 6, lines 1-50 only mentions the D/A conversion of the video signal occurring

prior to the output to the television system and nothing about the D/A conversion from the signal from the signal dispensing unit to the outputting unit. Furthermore, using figure 5 cited earlier by the Examiner, the outputting unit, if it is assumed to be reference 202 of Cheney and also the signal processing unit, then Cheney clearly fails to show a D/A conversion of the signal from the signal dispensing unit to the outputting unit. As mentioned above, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03.

V. 37 C.F.R. §1.104

Further clarification by Examiner would be very helpful to the Applicant. Respectfully, the Examiner must provide the completeness in the rejection under 37 C.F.R. §1.104(b) and (c) in formulating the rejection. As mentioned in 37CFR §1.104 (c)(2), "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable." Concerning certain rejections, a string of passages were quoted without any particular reference to the particular parts being relied on. The particular parts relied upon were not mentioned and therefore it makes it difficult for the Applicant to respond to the Examiner's rejection. Quoting large portions of the text does not always take the place of showing the particular part especially when it is not entirely clear what particular parts are being referenced from the body of text quoted. The Applicant would greatly appreciate the Examiner's help in this matter.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment. Should there be a deficiency in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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